

Claims

- [1] A backlight device comprising:
light guide means, having a pair of main faces facing each other and edge faces, for guiding the light from a light source arranged at one edge face;
luminance/luminance-viewing angle improvement means, arranged on the side of one main face, emitting the light in a substantially normal direction to said main face and a direction of having a predetermined angle to the normal direction; and
reflective means arranged on another main face of said light guide means.
- [2] A backlight device as claimed in claim 1, wherein said luminance/luminance-viewing angle improvement means is asymmetric prism sheet having a plurality of projections.
- [3] A backlight device as claimed in claim 2, wherein said projections of said asymmetric prism sheet have a first base angle α of 75 ° to 90 ° and a second base angle β of 45 ° to 60 ° .
- [4] A backlight device as claimed in claim 2 or 3, wherein said projections of said asymmetric prism sheet have a first base angle α of 85 ° and a second base angle β of 50 ° .
- [5] A backlight device as claimed in claim 3 or 4, wherein said first base angle α of projections is positioned at the side of said light source.
- [6] A backlight device according to any one of claims 1 to 5, wherein diffusion means is arranged between said light guide means and said luminance/luminance-viewing angle improvement means.
- [7] A backlight device as claimed in claim 6, wherein a symmetric prism sheet, which has a plurality of projections, is arranged between said diffusion means and said luminance/luminance-viewing angle improvement means.
- [8] A backlight device as claimed in claim 7, wherein said asymmetric prism sheet is arranged such that a ridge of said asymmetric prism sheet is substantially perpendicular to a ridge of said symmetric prism sheet.
- [9] A liquid crystal display device comprising a backlight device as claimed in any one of claims 1 to 8.